Play:     **4301**     **Upper Paleozoic**

Province:   **43**     **Palo Duro Basin**

Geologist:   **Ball, M.M.**                          **Status:**     **confirmed**

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**Play Attributes:**              **Probability of Occurrence**

| | |
|---|---|
| **Charge** | **1.00** |
| **Reservoir rock** | **1.00** |
| **Traps** | **1.00** |
| **Play Probability** | **1.00** |

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**Size of Undiscovered Accumulations (>1 MMBOE) (Conditional):**

| | Oil Accumulations | | Gas Accumulations | |
|---|---|---|---|---|
| **Median** | **5** | **MMBO** | | **BCFG** |
| **F5 of Largest Accumulat** | **25** | **MMBO** | | **BCFG** |
| **TSP Shape Factor** | **2** | | | |
| **Mean (calculated)** | **6.7** | **MMBO** | | **BCFG** |

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**Number of Undiscovered Accumulations (>1 MMBOE) (Conditional):**

| | Oil Accumulations | Gas Accumulations |
|---|---|---|
| **Minimum** | **2** | **0** |
| **Median** | **4** | **0** |
| **Maximum** | **10** | **0** |
| **Mean (calculated)** | **4.9** | **0.0** |

Play:      **4301**      **Upper Paleozoic**

Province:      **43**      **Palo Duro Basin**

Geologist:      **Ball, M.M.**                     Status:      **confirmed**

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**Ratio of Associated-Dissolved Gas to Oil:**      **79 CFG/bbl**

**Ratio of NGL to Non-Associated Gas:**      **bbl/MMCF**

**Ratio of NGL to Associated-Dissolved Gas:**      **0 bbl/MMCF**

| API Gravity (degrees): | minimum | mean | maximum |
|---|---|---|---|
| | 29.0 | 39.0 | 48.0 |

| Depth of Oil Accumulations (ft): | minimum | median | maximum |
|---|---|---|---|
| | 1,500 | 5,000 | 8,200 |

| Depth of N-A Gas Accumulations (ft): | minimum | median | maximum |
|---|---|---|---|

Play: 4301   Upper Paleozoic
Province: 43   Palo Duro Basin
Geologist: Ball, M.M.                                Status:   confirmed

Estimated Resources:

### Oil (MMBO)

| F99 | F95 | F75 | F50 | F25 | F5 | F1 | mean | s.d. |
|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1.40 | 3.10 | 10.50 | 21.30 | 37.80 | 63.10 | 80.70 | 32.70 | 20.10 |

### NGL (MMBNGL)

| F99 | F95 | F75 | F50 | F25 | F5 | F1 | mean | s.d. |
|-----|-----|-----|-----|-----|-----|-----|------|------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### Associated-Dissolved Gas (BCFG)

| F99 | F95 | F75 | F50 | F25 | F5 | F1 | mean | s.d. |
|-----|-----|-----|-----|-----|-----|-----|------|------|
| 0.11 | 0.24 | 0.83 | 1.68 | 2.99 | 4.98 | 6.38 | 2.60 | 1.59 |

### Non-Associated Gas (BCFG)

| F99 | F95 | F75 | F50 | F25 | F5 | F1 | mean | s.d. |
|-----|-----|-----|-----|-----|-----|-----|------|------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |